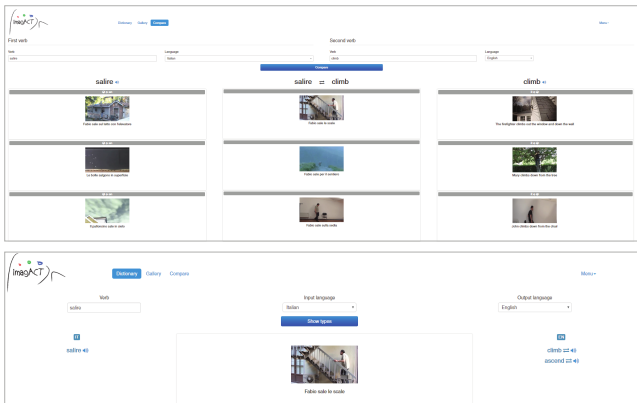


MARKED ANNOTATION OF HIGH FREQUENCY GENERAL ACTION VERBS

Paola Vernillo - LABLITA University of Florence

INTRODUCTION

- IMAGACT multilingual ontology identifies the action categories referred by general verbs:
- it contains 1010 distinct action concepts
 - each concept has been represented by means of prototypical scenes
 - it contains more than 500 verbs for each language.
 - all the occurrences are judged on the basis of semantic variation level:
 - primary variation is the set of different action types to which a verb can refer in its proper sense
 - marked (secondary) variation is the set of non primary uses of action, in which a semantic process operates and in which a shifting of the original meaning to abstract/figurative extensions occurs.



METHODS

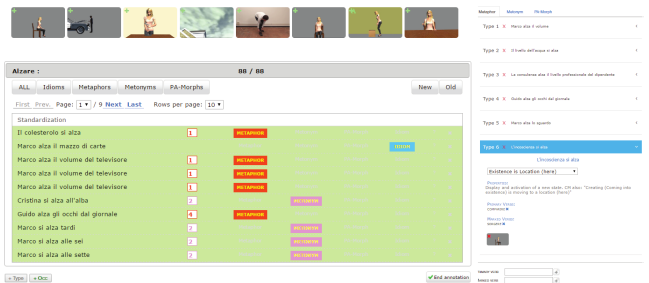
Our research methodology is based on a dual approach:

- corpus based: the linguistic material has been extracted from IMAGACT corpus
- competence based: marked occurrences have been judged on the basis of the annotator semantic competence

The annotation process has been structured in the following steps:

- occurrences interpretation by use of context
- occurrences categorization in different marked typologies (metaphors, metonymies, idioms and morphisms)
- gathering of occurrences of the same metaphorical type
- selection of the best example for each type
- description of marked type properties
- selection of one conceptual metaphor in Lakoff's Master Metaphor List
- selection of equivalent verbs (in the primary and marked meaning)
- link to a prototypical scene

At the end of annotation process, each marked typology is internally structured in coherent marked types.



OBJECTIVES

- Through the classification of marked uses of general action verbs, we aim to:
- analyze how metaphoric processes work within a specific part of the lexicon, i.e. action verbs
 - explain the semantic of these expressions within the framework of cognitive metaphor
 - connect marked uses to physical and primary ones on a linguistic and visual way.

RESULTS

Semantic features analysis

Each marked type highlights on a specific feature or set of features of the verb primary meaning.

The same concept (i. e. in some dimensional marked types) can be expressed by different verbs:



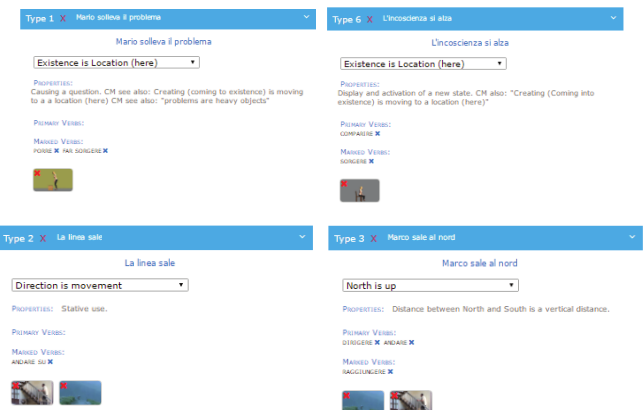
Conceptual approach analysis

The 66% of occurrences are metaphors, the 23% are idioms, and the 9% metonymies.

The major part of annotated occurrences are understandable in Lakoff's framework.

Different marked types could be produced by the same conceptual metaphor.

Similar marked types could be referred to different conceptual metaphors.



Primary-marked relation

In more than 80% of annotated metaphor, the relation between primary and marked uses of the same verb passes through the prototypical scene present in IMAGACT. In annotated metonymies cases, the relation with a prototypical scene is clearer and the link percentage is higher, about 90%.

DATASET

Our annotation regarded 22 Italian general action verbs that have a high frequency in spoken language.

Some quantitative data:

- our verb list contains 5819 primary occurrences
- we processed 1465 marked occurrences
- for each verb, we show the verbal frequency rank and the total frequency rank (it contains other parts of speech occurrences)
- the verbs selected have different marked percentage: high (over 50%), medium (30-40%), low (20% or less).

Lemma	Frequency	Fq Rank	Verb Rank
aprire	750	236	46
girare	654	267	53
rompere	557	307	61
tirare	546	310	62
buttare	541	311	63
chiudere	495	338	68
alzare	345	465	86
scendere	315	509	94
salire	211	698	128
attaccare	206	715	130
battere	198	735	134
raccolgere	164	868	155
spingere	161	885	157
inserire	126	1088	196
colpire	100	1307	234
picchiare	90	1400	247
lanciare	84	1478	256
staccare	77	1588	276
attraversare	58	2046	347
abbassare	52	2240	381
cogliere	46	2448	415
sollevare	43	2599	448

Lemma	Marked	Mark/Tot
chiudere	177	35,76%
cogliere	32	69,57%
colpire	68	68,00%
inserire	85	67,46%
staccare	33	42,86%
battere	81	40,91%
abbassare	21	40,38%
lanciare	33	39,76%
sollevare	16	37,21%
raccolgere	55	33,33%
attraversare	19	32,76%
scendere	87	27,30%
alzare	88	25,21%
attaccare	46	22,33%
girare	142	21,71%
aprire	156	20,80%
spingere	33	19,88%
tirare	106	19,41%
salire	39	17,84%
rompere	75	13,46%
buttare	68	12,57%
picchiare	5	5,56%